



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Am

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,544	10/24/2003	Carl M. Burnett	19224.02	6894

37833 7590 06/14/2005

LITMAN LAW OFFICES, LTD
PO BOX 15035
CRYSTAL CITY STATION
ARLINGTON, VA 22215

EXAMINER

CHEN, CHONGSHAN

ART UNIT	PAPER NUMBER
----------	--------------

2162

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,544

Applicant(s)

BURNETT, CARL M.

Examiner

Chongshan Chen

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to Amendment filed on 22 March 2005. Claims 1-22 are pending in this Office Action.

Terminal Disclaimer

2. The terminal disclaimer filed on 22 March 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,681,231 B1 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-7, 12-20 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As set forth in MPEP 2106 (IV) (B) (1):

“Data structure” is “a physical or logical relationship among data elements, designed to support specific data manipulation functions.” Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute “descriptive material.” Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material”. In this context, “functional descriptive material” consists of data structures and computer programs which impart functionality when employed as a computer component. “Nonfunctional descriptive material” includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of “descriptive material” are

nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F3d at 1360, 31 USPQ2d .

In particular, the claimed subject matter of claims 1-7, 12-20 and 22, especially claims 1 and 12 is a data format, the limitations are directed to descriptive material per se: **geospatial data format, converted from global positioning system coordinates in latitude and longitude format or decimal equivalent format and additional spatial information.** Therefore, claims 1-7, 12-20 and 22 are rejected because the limitation of the claim is just a mere arrangement of data without any functional descriptive material.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by “The NMEA FAQ” (hereinafter “NMEA”, “The NMEA FAQ”, version 6.1, Sept. 15, 1997, <http://www.kh-gps.de/nmea.faq>).

As per claim 1, NMEA discloses a geospatial entity object code (GEOCode) embodied on a medium, said GEOCode comprising a single concatenated numeric geospatial data format converted from global positioning system coordinates in latitude and longitude format or decimal equivalent format and additional spatial information (NMEA, page 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over “The NMEA FAQ” (hereinafter “NMEA”, “The NMEA FAQ”, version 6.1, Sept. 15, 1997, <http://www.kh-gps.de/nmea.faq>) in view of Lachinski et al. (hereinafter “Lachinski”, 5,633,946).

As per claim 2, NMEA teaches all the claimed subject matters as discussed in claim 1, except for explicitly disclosing the GEOCode according to claim 1, in combination with converting means for converting global position system coordinates in latitude and longitude format or decimal equivalent format and additional spatial information into the GEO code for encoding onto a video frame at a time of media acquisition. Lachinski teaches converting global position system coordinates into the GEO code for encoding onto a video frame at a time of media acquisition (Lachinski, Fig. 2, element 24, GPS receiver, element 16, data acquisition control computer, element 20, video tape recorder, col. 2, lines 24-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the NMEA by combining with the video tape recorder of Lachinski. The motivation being to provide the system of NMEA with a recording capability and record the geospatial data into a video so that the data can be later reviewed as many times as is necessary to validate the accuracy.

As per claim 3, NMEA and Lachinski teach all the claimed subject matters as discussed in claim 2, and further teach encoding means for encoding geospatial data onto a data segment of

Art Unit: 2162

a video frame at a time of geospatial data acquisition (Lachinski, Fig. 2, element 24, GPS receiver, element 16, data acquisition control computer, element 20, video tape recorder, col. 2, lines 24-38).

As per claim 4, NMEA and Lachinski teach all the claimed subject matters as discussed in claim 3, and further teach capturing means having a geospatial receiver interconnected with a focus element at a first location, said capturing means being configured for capturing information of an entity at a second location, and geospatially referencing the second location to the first location in accordance with a focus ratio of the focus element and geospatial data associated with the geospatial receiver (Lachinski, col. 4, line 64 – col. 5, line 9).

As per claim 6, NMEA and Lachinski teach all the claimed subject matters as discussed in claim 4, and further teach production means for producing integrated geospatial datasets (Lachinski, col. 2, lines 10-14).

As per claim 7, NMEA and Lachinski teach all the claimed subject matters as discussed in claim 4, and further teach distribution means for distributing geospatial datasets (Lachinski, col. 2, lines 10-14).

9. Claims 5, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over “The NMEA FAQ” (hereinafter “NMEA”, “The NMEA FAQ”, version 6.1, Sept. 15, 1997, <http://www.kh-gps.de/nmea.faq>) in view of Lachinski et al. (hereinafter “Lachinski”, 5,633,946) and further in view of O’Neill, Jr. et al. (hereinafter “O’Neill”, US 6,141,570).

As per claim 5, NMEA and Lachinski teach all the claimed subject matters as discussed in claim 4, except for explicitly disclosing scheduling means for scheduling requests for acquisition of geospatial data, said geospatial data including visual, audio, textual, and geospatial

Art Unit: 2162

information. O'Neill teaches scheduling means for scheduling requests for acquisition of geospatial data, said geospatial data including visual, audio, textual, and geospatial information (O'Neill, col. 2, lines 25-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the NMEA and Lachinski's combined system by incorporating the scheduling means as disclosed by O'Neill. The motivation being to provide an automatic acquisition based on a time-driven schedule.

Claims 9 and 13 are rejected on grounds corresponding to the reasons given above for claim 5.

10. Claims 8, 10-12, 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lachinski et al. (hereinafter "Lachinski", 5,633,946) in view of "The NMEA FAQ" (hereinafter "NMEA", "The NMEA FAQ", version 6.1, Sept. 15, 1997, <http://www.kh-gps.de/nmea.faq>).

As per claim 8, Lachinski discloses acquisition means for acquiring geospatial data, said acquisition means comprising:

encoding means for encoding geospatial data onto a data segment of a video frame at a time of geospatial data acquisition (Lachinski, Fig. 2, element 24, GPS receiver, element 16, data acquisition control computer, element 20, video tape recorder, col. 2, lines 24-38);

capturing means having a geospatial receiver interconnected with a focus element at a first location, said capturing means being configured for capturing information of an entity at a second location, and geospatially referencing the second location to the first location in accordance with a focus ratio of the focus element and geospatial data associated with the geospatial receiver (Lachinski, col. 4, line 64 – col. 5, line 9).

Lachinski does not explicitly disclose converting means for converting global positioning system coordinates in latitude and longitude format or decimal equivalent format and additional spatial information into a single concatenated numeric geospatial data format for encoding onto a video frame at a time of media acquisition.

NMEA teaches converting global positioning system coordinates in latitude and longitude format or decimal equivalent format and additional spatial information into a single concatenated numeric geospatial data format for encoding onto a video frame at a time of media acquisition (NMEA, page 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the geospatial data acquisition system of Lachinski by incorporating a converting mean in the same conventional manner as disclosed by NMEA (NMEA, page 5). The motivation being to convert the geospatial data into a decimal equivalent format for easy process and transfer.

Claims 10-12 and 14-19 are rejected on grounds corresponding to the reasons given above for claims 1-4 and 6-8.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over “The NMEA FAQ” (hereinafter “NMEA”, “The NMEA FAQ”, version 6.1, Sept. 15, 1997, <http://www.kh-gps.de/nmea.faq>) in view of Faustini (US 6,496,870 B1).

As per claim 20, NMEA teaches all the claimed subject matters as discussed in claim 1, except for explicitly disclosing wherein said single concatenated numeric geospatial data format is stored in an encapsulated object class. Faustini teaches said single concatenated numeric geospatial data format is stored in an encapsulated object class (Faustini, col. 3, line 65 – col. 4, line 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 2162

invention was made to modify the data format of NMEA by storing the data format in an encapsulated object class as disclosed by Faustini (Faustini, col. 3, line 65 – col. 4, line 17). The motivation being to use the object in an object-oriented programming for easy and efficient manipulating of the data.

12. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lachinski et al. (hereinafter “Lachinski”, 5,633,946) in view of “The NMEA FAQ” (hereinafter “NMEA”, “The NMEA FAQ”, version 6.1, Sept. 15, 1997, <http://www.kh-gps.de/nmea.faq>) and further in view of Faustini (US 6,496,870 B1).

As per claim 21, Lachinski and NMEA teach all the claimed subject matters as discussed in claim 8, except for explicitly disclosing said converting means stores said single concatenated numeric geospatial data format in an encapsulated object class. Faustini teaches storing said single concatenated numeric geospatial data format in an encapsulated object class (Faustini, col. 3, line 65 – col. 4, line 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lachinski and NMEA’s combined system by storing the data format in an encapsulated object class as disclosed by Faustini (Faustini, col. 3, line 65 – col. 4, line 17). The motivation being to use the object in an object-oriented programming for easy and efficient manipulating of the data.

Claim 22 is rejected on grounds corresponding to the reasons given above for claim 21.

Response to Arguments

13. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (571) 272-4031. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2162

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chongshan Chen
June 7, 2005



JEAN M. CORRIELLUS
PRIMARY EXAMINER